



TFW 2818

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Jerome M. Eldridge et al.

Title: ATOMIC LAYER DEPOSITION OF METAL OXIDE AND/OR LOW ASYMMETRICAL  
TUNNEL BARRIER INTERPOLY INSULATORS

Docket No.: 1303.045US1

Serial No.: 10/081,818

Filed: February 20, 2002

Due Date: N/A

Examiner: Tu-Tu V. Ho

Group Art Unit: 2818

**MS Amendment**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

☒ Return postcard.

☒ Communication Concerning Related Applications (1 pg.).

☒ Supplemental Information Disclosure Statement (2 pgs.), Form 1449 (1 pg.), and copies of 3 cited documents.

If not provided for in a separate paper filed herewith, Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

Customer Number 21186

By: 

Atty: Timothy B. Clise

Reg. No. 40,957

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 8 day of February, 2007.

USA Poesche

Name

Susan Poesche

Signature

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

(GENERAL)



N 10/081,818

PATENTIN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Jerome M. Eldridge et al. Examiner: Tu-Tu V. Ho  
Serial No.: 10/081,818 Group Art Unit: 2818  
Filed: February 20, 2002 Docket: 1303.045US1  
Title: ATOMIC LAYER DEPOSITION OF METAL OXIDE AND/OR LOW  
ASYMMETRICAL TUNNEL BARRIER INTERPOLY INSULATORS

COMMUNICATION CONCERNING RELATED APPLICATIONS**MS Amendment**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Applicants would like to bring to the Examiner's attention the following related applications in the above-identified patent application:

<u>Serial/Patent No.</u>	<u>Filing Date/Issue Date</u>	<u>Attorney Docket</u>	<u>Title</u>
11508090	August 22, 2006	1303.024US4	FLOATING GATE STRUCTURES
11590363	October 31, 2006	1303.014US3	FLASH MEMORY WITH LOW TUNNEL BARRIER INTERPOLY INSULATORS
11565826	December 1, 2006	1303.141US2	HAFNIUM TITANIUM OXIDE FILMS
11619080	January 2, 2007	1303.027US4	IN SERVICE PROGRAMMABLE LOGIC ARRAYS WITH LOW TUNNEL BARRIER INTERPOLY INSULATORS

Continuations and divisionals may be later filed on the cases listed above, or cited to the Examiner in any previous Communication Concerning Related Applications. Applicants request that the Examiner review all continuations and divisionals of the above-listed or previously-cited patent applications before allowing the claims of the present patent application.

Respectfully submitted,

JEROME M. ELDRIDGE ET AL.

By Applicants' Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402  
(612) 349-9587

Date

8 Feb '07

By

Timothy B. Clise

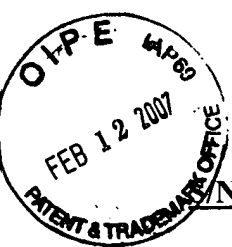
Reg. No. 40,957

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Name

Lisa Rosarske

Signature



N 10/081,818

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Jerome M. Eldridge et al.	Examiner:	Tu-Tu V. Ho
Serial No.:	10/081,818	Group Art Unit:	2818
Filed:	February 20, 2002	Docket:	1303.045US1
Title:	ATOMIC LAYER DEPOSITION OF METAL OXIDE AND/OR LOW ASYMMETRICAL TUNNEL BARRIER INTERPOLY INSULATORS		

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**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Supplemental Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Supplemental Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Supplemental Information Disclosure Statement considered.

## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Serial No :10/081,818

Filing Date: February 20, 2002

Title: ATOMIC LAYER DEPOSITION OF METAL OXIDE AND/OR LOW ASYMMETRICAL TUNNEL BARRIER INTERPOLY INSULATORS

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Pursuant to 37 C.F.R. 1.98(a)(2), Applicant believes that copies of cited U.S. Patents and Published Applications, and Non-Published Applications identifiable by USPTO Serial Number, are no longer required to be provided to the Office. Notification of this change to this effect was provided in the United States Patent and Trademark Office OG Notices dated October 12, 2004 and October 19, 2004. Thus, Applicant has not included copies of any US Patents or US Patent Applications identifiable by serial number that may be cited with this submission. Should the Office require copies to be provided, Applicant respectfully requests that notice of such requirement be directed to Applicant's below-signed representative. Applicant acknowledges the requirement to submit copies of foreign patent documents and non-patent literature in accordance with 37 C.F.R. 1.98(a)(2).

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,

JEROME M. ELDRIDGE ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402  
(612) 349-9587

Date

8 Feb '07

By



Timothy B. Clise  
Reg. No. 40,957

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Name

USA Posarske

Signature



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/081,818
Filing Date	February 20, 2002
First Named Inventor	Eldridge, Jerome
Group Art Unit	2818
Examiner Name	Ho, Tu-Tu

Attorney Docket No: 1303.045US1

Sheet 1 of 1

**US PATENT DOCUMENTS**

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
	US-5,042,011	08/20/1991	Casper, Stephen L., et al.	05/22/1989
	US-5,280,205	06/18/1994	Green, Robert S., et al.	04/16/1992
	US-5,497,494	03/05/1996	Combs, James L., et al.	07/23/1993
	US-5,619,642	04/08/1997	Nielsen, Michael E., et al.	12/23/1994
	US-5,627,785	05/06/1997	Gilliam, Gary R., et al.	03/15/1996
	US-5,691,230	11/25/1997	Forbes, Leonard	09/04/1996
	US-6,134,175	10/17/2000	Forbes, Leonard , et al.	08/04/1998
	US-6,135,175	10/24/2000	Gaudreault, Pierre , et al.	10/19/1998
	US-6,153,468	11/28/2000	Forbes, Leonard , et al.	05/17/1999
	US-6,249,020	06/19/2001	Forbes, Leonard , et al.	08/27/1998
	US-6,307,775	10/23/2001	Forbes, Leonard , et al.	08/27/1998
	US-6,323,844	11/27/2001	Yeh, Fu-Kuo , et al.	08/11/1997
	US-6,351,411	02/26/2002	Forbes, Leonard , et al.	06/12/2001

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	T <sup>2</sup>
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**OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		AHN, KIE Y., et al., "MAGNESIUM TITANIUM OXIDE FILMS", <u>U.S. Application Serial No. 11/189,075, filed July 25, 2005 (Attorney Docket 1303.148US1)</u>	
		HODGES, D. A., et al., "Analysis and Design of Digital Integrated Circuits", <u>McGraw-Hill Book Company, 2nd Edition, (1988),394-396</u>	
		HODGES, D. A., "Analysis and Design of Digital Integrated Circuits, 2nd Edition", <u>McGraw-Hill Publishing. New York, (1988),354-357</u>	
		SHI, YING , et al., "Tunneling leakage current in ultrathin (<a4 nm) nitride/oxide stack dielectrics", <u>IEEE Electron Device Letters, 19(10), (1998),388-390</u>	

**EXAMINER****DATE CONSIDERED**

Substitute Disclosure Statement Form (PTO-1449)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached